

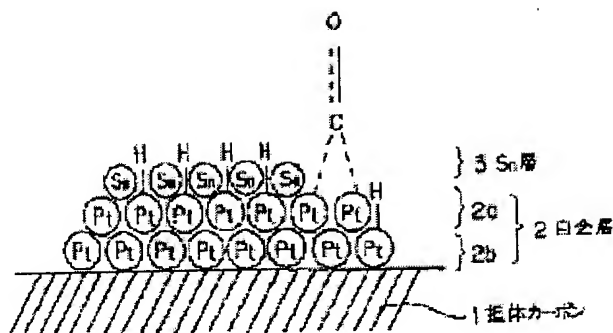
FUEL CELL ELECTRODE AND ITS MANUFACTURE

Patent number: JP8022827
Publication date: 1996-01-23
Inventor: MAOKA TADANORI
Applicant: TOSHIBA CORP
Classification:
 - international: H01M4/86; H01M4/88; H01M8/02
 - european:
Application number: JP19940155571 19940707
Priority number(s):

Abstract of JP8022827

PURPOSE: To provide a fuel cell electrode having a large reaction surface area, high resistance to various impurities in fuel gas, and an excellent catalytic function.

CONSTITUTION: A carbon supported platinum catalyst is kneaded with a fluoro- binding agent, is then applied onto a conductive porous gas, and baked to form a porous gas diffusion electrode. Next, the porous gas diffusion electrode is immersed for about one hour in a solution obtained by the dissolving of 2%, SnCl₄ and an excess amount of sodium formate in one mol of H₃PO₄, and the electrode is dried and completed. A catalyst layer comprises a support carbon 1, platinum layers 2 supported by the carbon 1, and Sn layers 3 formed on the surface of the platinum layers 2 as base metal element layers. In this case, a plurality of platinum layers 2 are formed with fine particles as units, and a single or plural Sn layers 3 are formed with fine particles as units.



Data supplied from the esp@cenet database - Patent Abstracts of Japan